

**REMARKS**

This Amendment and Response is submitted in reply to First Office Action.  
Applicant respectfully requests reconsideration and further examination of the patent application under 37 C.F.R. § 1.111.

Upon entry of the foregoing Amendment and Response claims 1-22, 24-33, 35-45, and 47-58 are pending in the application. The amendments are believed to introduce no new matter, and their entry is respectfully requested. Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections.

**Summary of First Office Action**

Claims 1-4, 7-12, 15-23, 28-35, 39-46, and 50-52 were rejected under 35 U.S.C. 102(b) as being anticipated by Tu et al. (U.S. Patent 6,381,463, herein referred to as Tu).

Claims 27, 38, and 49 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tu.

Claims 5-6, 13-14, 24-26, 35-37, and 47-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tu in view of Arazi et al. (U.S. Patent 6,430,395, hereinafter referred to as Arazi).

**Summary of Amendment**

Applicant has cancelled claims 23, 34 and 46, amended claims 15, 16, 20, 29, 31, 42, 51, and 52 to more clearly define the invention, and added claims 53-58.

The word 'improving' was removed from claims 15 and 42.

The word 'scheme' was removed from claim 42.

The step of 'generating a map including coordinates of a radio coverage area of each access point within the wireless network' was removed from claims 16 and 42.

In each of the amended claims 16, 20, 29, 31, 42, and 51, "a wireless link" has been changed to "an impulse radio wireless link".

In claim 51, 'would hand off' was changed to 'hands off'.

Claim 52 was amended so that 'access point can alert' became 'access point alerts' and 'area known to have interference' became 'interference area'.

**Remarks regarding §102(b) rejection**

Claims 1-4, 7-12, 15-23, 28-35, 39-46, and 50-52 were rejected under 35 U.S.C. 102(b) as being anticipated by Tu . Applicant respectfully traverses this rejection. Action appears to correctly point out that Tu disclose a wireless network, a mobile station, and a plurality of access points. Action also appears to correctly point out that each of the plurality of access points of Tu is capable of managing a radio coverage area. However, Applicant respectfully disagrees that the access points of Tu are also capable of enabling an impulse radio wireless link with the mobile node. Action seems to equate an impulse radio wireless link to a channel impulse response as disclosed in Tu (col. 3, line 40 thru col. 4, line 25). However, Tu does not disclose an impulse radio wireless link, impulse radio technology, or impulse radios. Instead, Tu discloses determination of a channel impulse response for a cellular communications link. As is well known in the art, channel impulse response

characterizes a transmission medium. The channel impulse response, for example, one that characterizes multipath or reflections in a wireless communication medium, can be measured for any wireless link involving any form of wireless technology: impulse or non-impulse. Thus, the disclosure by Tu of a measurement of the channel impulse response of a cellular communications link does not in any way teach or suggest using an impulse radio wireless link or impulse radio technology. Applicant respectfully submits that each of the pending claims is qualified by reference to "impulse radio" (e.g., impulse radio wireless link, impulse radio unit, impulse radio technology, impulse radio signals). It is believed that this requirement clearly distinguishes the claimed invention from confusing terminology such as "channel impulse response," because one of ordinary skill in the art would recognize that "impulse radio" as recited by the claimed invention is not the same or even similar to "channel impulse response." Consequently, Applicant believes this rejection as applied to claims 1-4, 7-12, 15-23, 28-35, 39-46, and 50-52 has been traversed.

**Remarks regarding First §103(a) rejection**

Claims 27, 38, and 49 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tu. Applicant respectfully traverses this rejection. Action states that Tu does not specifically disclose mobile node handoff of communications to a second access point after completion of data transfer but submits that mobile station always handoff communication to the second access point after completion of data transfer. As described above in relation to the §102(b) rejection, Applicant submits that Tu does not in any way suggest or teach an impulse radio wireless link, impulse radios, or impulse radio technology as is taught by the

present application. Applicant submits that each of the pending claims is limited to impulse radios (e.g., impulse radio wireless link, impulse radio unit, impulse radio technology, impulse radio signals) and therefore Applicant believes this rejection as it applies to claims 27, 38, and 49 has been traversed.

**Remarks regarding Second §103(a) rejection**

Claims 5-6, 13-14, 24-26, 35-37, and 47-48 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tu in view of Arazi. Applicant respectfully traverses this rejection. Action states that Tu does not specifically disclose certain aspects of the claimed invention (e.g., wireless network is a wireless local area network, mobile node is a laptop computer, mobile node is a personal digital assistant). Action also states these certain aspects are taught by Arazi and that it would have been obvious to one skilled in the art at the time the invention was made to modify the Tu system with the teach of Arazi to achieve the claimed invention. As described above in relation to the §102(b) rejection, Applicant submits that Tu does not in any way suggest or teach an impulse radio wireless link, impulse radios, or impulse radio technology as is taught by the present application. Applicant submits that Arazi. does not cure this defect. Applicant submits that each of the pending claims is limited to impulse radios (e.g., impulse radio wireless link, impulse radio unit, impulse radio technology, impulse radio signals) and therefore Applicant believes this rejection as it applies to claims 5-6, 13-14, 24-26, 35-37, and 47-4 has been traversed.

**Conclusion**

From the foregoing, Applicant respectfully submits that all of the stated grounds of rejection have been properly traversed, accommodated or rendered moot. Accordingly,

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Applicant respectfully requests that the application is in condition for allowance and respectfully requests such action.

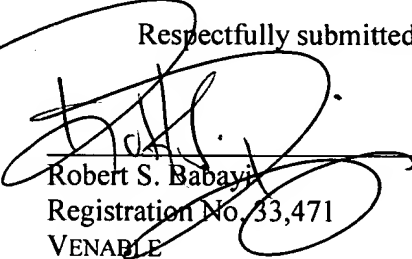
If the Examiner believes, for any reasons, that personal communication will expedite prosecution of this application the Examiner is invited to telephone the undersigned at the number provided.

Applicant believes there are no additional fees associated with this reply other than those indicated. However, if this is incorrect, the Commissioner is authorized to charge any fees which may be required for this paper to Deposit Account No. 22-0261

Date:

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